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The Influence of Learning Concentration on Preschool children Learning Outcomes

Adri Budiwanto[1]✉, Eddy Marheni[2], Nurul Ihsan[3], And Nurdin Widya[4]
Universitas Negeri Padang, Indonesia(1,2,3,4)
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Abstract
This study aims to determine the effect of concentration on the learning outcomes of early childhood students, specifically in physical education. Using the Causal Comparative Research method, this study compares two groups of students with different concentration levels to observe the differences in their learning outcomes. The data collected were analyzed using statistics, including the t-test, with a significance level 0.05. The results show that students with higher levels of concentration showed significant improvement in learning outcomes compared to students with lower levels of concentration. The coefficient of determination of 25.1% indicates that learning concentration contributes to sports learning outcomes, while 74.9% is influenced by other variables not examined in this study. These findings emphasize the importance of concentration in supporting the development of physical and cognitive skills in young children. The implications of this study suggest the need for teaching strategies that can enhance students' concentration, such as structured physical activities and more interactive learning. This research provides insights for educators to develop more effective teaching methods to improve concentration and learning outcomes in early childhood education.

Keywords: *Influence; learning concentration; learning outcomes*

✉ Corresponding author: Adri Budiwanto
Email Address : fadhilahsnq@gmail.com (Padang, Indonesia)
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Introduction

Education is a basic need for the next generation of the nation. It involves the conscious efforts of educators to create changes in students' behavior, character, skills, and intelligence (Danarjati et al., 2014). Education encompasses all efforts and actions of the older generation to pass on knowledge and skills to the younger generation, enabling them to fully perform their functions in social interaction. With the development of technology and globalization, education in Indonesia faces various challenges. The current period of globalization is followed by the progress that has occurred to date (Bafirman et al., 2019). The government continues to try to improve the quality of education. However, there are still challenges, such as inequality in the quality of education between regions, lack of funding and educational facilities, and shortcomings in the curriculum that are to the needs of society and the times (Lidyawati et al., 2017). The quality of education provided by the Indonesian education system can affect student learning outcomes at various levels. Therefore, the Indonesian government seeks to improve the quality of education to improve student learning outcomes. Efforts involve strengthening the curriculum, improving the quality of teachers and educators, and

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increasing the accessibility of education for all levels of society (Hita et al., 2021). In addition, technology integration in learning aims to improve student learning outcomes.

Learning can be done by everyone, whether children, adults, or older people. If someone has a sincere intention to learn, they can learn in various places and times. The word "*learning*" is very close to student or preschool because it is something they do every day, either at school or independently at home. Many students in preschool today take tutoring at school or bring in private tutors at home to deepen their knowledge.

In the modern era, studying is no longer the preferred routine for students in preschool. It is due to many things, including requiring high concentration, a lot of time and effort spent, feelings, and compulsion to stop playing fun activities rather than studying, such as playing online games, cell phones, or other activities that have adverse effects. Learning in a broad sense can be interpreted as a process of behavioral change expressed in mastery, use, and assessment or regarding attitudes and values, knowledge, and basic skills contained in various fields of study or, more broadly, in some aspects of life or organized experience (Heimlich & Ardoin, 2008).

However, the main problem with this research is that it requires a lot of concentration. Students in preschool need to stay concentrated until the lesson is over. Concentration is a crucial factor affecting student learning outcomes, defined as a student's ability to focus and concentrate on an activity or task (Hita et al., 2021). Learning concentration involves focused attention in the behavior change process, including mastery, utilization, and evaluation of attitudes, values, basic knowledge, and skills in each learning domain (Ikbal et al., 2017).

Learning concentration is significant in every learning process. Concentration is what supports student learning. If students cannot concentrate in class, they will not get anything out of the class, and it will not be good for them too. Concentration is so crucial for students that it is a prerequisite for them to achieve their learning goals successfully. Poor learning outcomes are not necessarily caused by low intellectual ability but rather by students' inability to concentrate on the material they are learning. When students focus on learning, they can easily absorb the content presented to them. Conversely, if they do not concentrate on learning, the material provided will not be understood. It is highlighted by Surya (2009) that with a learning focus, student learning outcomes will be much higher and more optimal.

Learning success is the result achieved by a student through the learning process. Learning success is very important for students because learning success is a measure of the success of activities during learning. One of the goals of the learning process is learning success. Student learning outcomes, expressed through scores derived from cognitive, affective, and psychomotor assessments, vary between individuals due to certain factors during the learning process. Internal and external conditions contribute to the learning process and outcomes, with internal factors involving psychological aspects such as intelligence, interest, talent, and attention. In contrast, external factors involve the learning environment, atmosphere, and surroundings (Rovai et al., 2009).

Internal factors, such as students' ability to concentrate on sports education, significantly affect their learning outcomes. Early childhood learning concentration is very important because it forms the foundation for their cognitive and social development, supporting future learning skills. Good concentration at an early age contributes to enhancing a child's ability to process information and complete tasks more effectively, leading to better academic achievements in the future (Kurniawati, 2022). In addition, concentration is closely related to strengthening self-control and emotional skills, which are crucial in social interactions and emotional regulation.

Concentration in learning is recognized as an important factor that influences the effectiveness of the learning process. However, its implementation in the field often faces various challenges that impact the effectiveness of early childhood education. As revealed in the study "Bangkit Lebih Kuat - Studi Kesenjangan Pembelajaran" by PSKP, the study shows that while concentration is considered important, other factors such as the quality of school

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facilities, the quality of teachers, and infrastructure also play a significant role in the learning process. Furthermore, Robert et al. (2022) identified that although the Merdeka Curriculum includes features that support student concentration, its implementation in the field faces challenges that create a gap between theory and practice. Challenges in the field indicate that concentration disruptions in early childhood are often influenced by environmental factors, such as a lack of proper stimulation or unsupportive family conditions (Widyastuti, 2020).

Observations at TK Pertiwi II regarding students' learning concentration revealed that it is often less than optimal because students ignore the teacher's explanation, lack of use of media and methods that can attract students' attention, lack of seriousness or perseverance in learning, as evidenced by daydreaming, playing alone, drawing on books, and making comments that are not related to the subject matter. These characteristics are the signs of students who lack concentration, including boredom, constant movement, not listening when spoken to, diverting the conversation, talking often, and disturbing others (Rahmayani., 2017; Suntari & Widianah, 2012).

Many factors can influence students' focus during learning. The teaching methods used are still limited to lectures and question-and-answer sessions, whereas students need a more personalized learning approach considering individual differences in concentration abilities to support children who struggle to maintain attention. The lack of more in-depth training for educators on how to support children's concentration, including techniques for managing attention and creating a learning environment that supports focus, is also a key issue. Additionally, classrooms are not designed to minimize visual and auditory distractions, and there is a lack of resources to support a more focused learning process, such as comfortable seating arrangements and the use of relevant teaching materials (Blair, 2002). It indicates the need for teachers to improve the classroom learning process (Cecep et al., 2022). To improve student concentration, sufficient time, teacher patience, and teacher guidance and attention are needed (Navia & Yulia, 2017).

Early childhood education (ECE) is an essential foundation for the development of future generations. Although many studies have highlighted the importance of concentration in learning, there is a significant gap in the literature examining the influence of concentration in the context of early childhood physical education. This study offers a new perspective by focusing on how learning concentration can affect learning outcomes in physical education, which often receives less attention than other academic fields. In this context, it is essential to identify aspects that have not been widely explored, such as the lack of empirical research on the effectiveness of interventions to improve concentration in early childhood physical education. This study aims to fill this gap by testing the efficacy of innovative and game-based learning methods and identifying specific factors in the physical education environment that can affect children's concentration. To strengthen the argument, the researcher will refer to the latest sources from relevant international journals, demonstrating the relevance of this study to current scientific developments. Thus, this study is expected to significantly contribute to developing more effective teaching methods in the context of early childhood physical education.

The phenomenon of weak student in preschool concentration can have adverse effects, affecting student learning outcomes. Theoretically, low concentration can lead to low-quality activities and a lack of seriousness in learning, affecting comprehension of the material. Concentration disruptions can hinder the learning process, reduce time efficiency, and contribute to low academic performance (Barkley, 2015).

Learning concentration affects the success of students' learning process and their ability to understand learning materials delivered by teachers (Muflikhah & Dwihartanti, 2018). especially for kindergarten children who we have to train to concentrate fully. Preschool students need concentration to understand concepts and solve problems, and if the concentration is lacking, it can affect their performance in learning. However, research regarding the effect of learning concentration on student learning outcomes still needs to be

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completed. This study focuses on the influence of learning concentration on early childhood learning outcomes in the context of physical education. Although learning concentration has been widely studied in the context of higher education, there is limited research linking concentration to learning outcomes in early childhood, particularly in the field of physical education. Most previous studies have focused more on academic disciplines, with very few exploring the relationship between concentration and learning achievement in physical activities or physical education for young children.

Metodologi

This research used type of causal-comparative research, which is included in the ex post facto category. The researcher was directly involved in data collection, processing, and concluding. The research design was used to describe the relationship between the variables studied and indicated the type of research in which the researcher did not control the independent variables directly because these variables had already occurred or could not be manipulated. The independent variable in this research was learning concentration (X), while the dependent variable was student preschool learning outcomes (Y). The research population included 369 TK Pertiwi II.

In determining the sample, the researcher conducted an initial measurement of the students' concentration levels for the high and low concentration groups using the Concentration Test by Harris and Harris (1984). This measurement aimed to identify the concentration level of each student, who was then grouped into two categories: high concentration and low concentration. After obtaining the concentration test results, the next step was to divide the students into two groups based on the scores they achieved. The grouping was based on the median criterion, where students above the median score were placed in the high concentration group, while those below the median were placed in the low concentration group. Next, the Stratified Random Sampling technique was used to ensure that both groups (high and low concentration) were proportionally represented. After grouping the students based on their concentration levels, a sample was randomly selected from each group to ensure that each group received a proportionate number of students according to the sample size determined by the researcher. Due to research limitations, the sample consisted of two classes. The final sample size was 32 preschool students, selected based on the high and low concentration assessment, which accounted for 27%.

Data were collected for the independent variable (learning concentration) using the Grid Concentration Test by Harris and Harris (1984), The Grid Concentration Test is an instrument designed to measure concentration through activities that test attention and the ability to focus on specific tasks. This test is typically used to measure concentration abilities in older age groups, but in this study, it was adapted for early childhood by modifying the format and instructions. Before conducting the t-test, a validity and reliability test of the students' activity sheets and scores was first performed. The researcher made several adjustments related to the validity of the instrument, ensuring that the test was tailored to the capabilities of young children. The grid format and simplified tasks in the test were used to match the level of understanding and attention of the children. Content validation was conducted by asking experts in early childhood education and developmental psychology to assess whether the test was appropriate for the targeted age group and if it effectively measured relevant aspects of concentration within the context of early childhood education. Additionally, the test was validated and confirmed to measure concentration, not other factors such as memory or motor skills.

The researcher had ensured the reliability of the Grid Concentration Test in the context of early childhood. The test was initially pilot-tested on a smaller group of young children to assess the consistency of the test in measuring concentration across different children. Reliability coefficients were calculated. Subsequently, a retest was conducted, where the researcher administered the same test to the same sample at two different times to examine the

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stability of concentration measurements over time. The collected data were then processed using statistical analysis, including a t-test with a significance level of 0.05. This method was used to test the research data and analyze the relationship between the learning concentration variable and preschool children's physical education learning outcomes.

In ex post facto research, it is crucial to identify and control confounding variables that may affect the relationship between concentration and learning outcomes. To ensure objective sample selection, these factors must be controlled by the researcher using matching techniques and incorporating them as control variables in statistical analysis. Matching: The researcher matched children in the high concentration group with children in the low concentration group based on important variables that could influence learning outcomes, in order to reduce the influence of external factors that could undermine the validity of the results. Using Control Variables in Statistical Analysis: The researcher can include confounding variables as control variables to manage their impact. These variables are incorporated into statistical analysis as control factors to examine the effect of concentration on learning outcomes more accurately, without being influenced by these confounding variables.

Result and Discussion

From the measurement results taken on the sample of students In TK Pertiwi II , the highest score was 20, and the lowest score was 3, with an average of 10.74 standard deviations of 4.13.

Table 1. Student concentration data

Interval cla	Frequenci	Percentage ('	Category
21 and above	0	0.0	Very good
16-20	7	12.3	Good
11-15	24	42.1	Simply
6-10	20	35.1	Less
5-down	6	10.5	Very Less
Total	57	100	

Based on the calculations in Table 1, no students (0%) have a concentration in the interval class 21 and above, 7 students preschool (12.3%) have a concentration in the interval class 16-20, 24 students (42.1%) have a concentration in the interval class 11-15, 20 students (35.1%) have a concentration in the interval class 6-10, 6 students (10.5%) have a concentration in the interval class 5 and below. Based on the data above, it shows that there are no preschool children with very high concentration levels. According to the researcher's observation, this is due to the presence of many distractions that cause their attention to be divided during learning. Several factors contribute to this lack of concentration, such as inappropriate teaching methods, limited attention span, physical conditions, and others. This research is in line with Manurung & Simatupang (2019), who state that children who feel tired or hungry may struggle to concentrate. Poor physical condition can disrupt their learning process. Furthermore, the use of teaching methods or media that do not align with children's characteristics can cause them to lose interest and focus. For example, material presented monotonously or without interactivity can make it easier for children to become distracted (Santi, 2022). Another researcher adds that children have a shorter attention span compared to adults, which makes them more prone to distractions and difficulty focusing for extended periods (Wan, 2018). However, the data results indicating that no students have high concentration levels contradict Chalidaziah (2019), who states that, generally, early childhood learning concentration falls within the good category, with 60% of children having high concentration, 24% being uncertain, and 16% being unprepared.

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Student preschool sports learning outcomes

This section shows the value of preschool sports results. Based on the data obtained by the researcher in the field in the form of documentation of sports learning outcomes of students in TK Pertiwi II at the time of the research, the highest score was 100, while <75 means not meeting teaching completeness or failing. In Table 2, Preschool scores in sports lessons got a mean of 80.91 with a standard deviation of 5.41, which indicates that in the form of Preschool scores are not very distributed in excellent scores.

Table 2. Descriptive of student Preschool sports learning outcomes

Value interv	Frequencie	Percentage	Category
93 – 100	2	3,5%	Very good
84 – 92	14	24.6%	Good
75 – 83	36	63,1%	Simply
<75	5	8.8%	Less
Total	57	100%	

Most of the sports learning outcomes of students preschool in class A Besar and B Besar TK Pertiwi II Muaro Bungo are said to be in the sufficient category (75-83), and only a small portion are in the low category (<75). Thus, in general, the sports learning results in these students preschool can be said to be sufficient. Concentration is an important factor that affects the athletic performance of preschool children. It shows that students do not concentrate well in physical education lessons. This aligns with Sari (2025), whose research indicates that regular and consistent physical exercise can improve students' learning concentration. Duncan et al. (2007) state that better attention during physical activity can increase children's engagement in activities, which contributes to their learning outcomes. The findings of this study support the idea that concentration in physical education can enhance motor and cognitive skills in young children, leading to better learning results. Although the primary focus of this research is on learning concentration, the findings suggest that improving concentration can contribute to better sports performance. Another researcher, Almeida, R., & Ferreira, J. (2014), found that high attention during physical activities can improve children's involvement in physical education. These findings are consistent with this study, which shows that children with high concentration in physical activities are more likely to succeed in achieving physical education learning goals. However, this contradicts Hita et al. (2021), whose research published in the Journal of Physical Education and Health suggests that, besides concentration, factors such as motivation, interest, learning methods, and environmental factors also influence learning outcomes. This study emphasizes the importance of considering various factors in efforts to improve students' learning outcomes.

Data Analysis of Research Results

After the research data in the form of activity assessments and learning outcomes were obtained, they were analyzed as follows.

Prerequisite test analysis of research data and hypothesis submission
Normality Test results of student learning outcomes data

The results of the normality test of student learning outcomes data can be seen in Table 3 below. Based on the results of the normality test, it is known that the *significance* value (*Sig.*) of student preschool learning outcomes shows results greater than 0.05, which means that the data is usually distributed.

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Table 3. Normality test results of student learning outcomes data

Normality test	Kolmogorov-Smirnov[a] Statistic	Shapiro-Wilk df	Sig.	Statistic	df	Sig.
Student presch ScoreY	.107	32	.200*	.957	32	.221

Linearity test

Table 4. Linearity test results

	Sum of square	Df	Mean squar	F	Sig.		
Student score (Y)* Concentratio (X)	Between grou	(Combined)	756.375	12	63.031	2.092	.073
		Linearity	333.756	1	333.756	11.077	.004
		Deviation from linea	422.619	11	38.420	1.275	.309
	Within groups	572.500	19	30.132			
	Total	1328.875	31				

Based on the results of the linearity test above, it can be seen that the result of the deviation from linearity is 0, 309, which is > 0, 05. It can be concluded that the independent and dependent variables have a linear relationship. With these data results, researchers can conduct further tests.

Simple Regression Test
Determination rest (R-square)

Table 5. Determination test results model summary

Model	R	R-square	Adjusted R-squa	Std. error of the estimate
1	.501[a]	.251	.226	5.759
a. Predictors: (Constant), Concentration(X)				

The calculation results show a correlation coefficient (r) of 0.501 and a coefficient of determination (KD) of 0.251 were obtained. Based on the interpretation of the value (r) in Table 3.4, the results above show that the level of influence caused is at a moderate level, and the learning concentration on student sports learning outcomes is 25.1%. It shows that by using a regression model, where the independent variable (student concentration) influences the dependent variable (learning outcomes) by (25.1%) while (74.9%) is influenced by other variables. This study found that concentration has a significant impact on early childhood learning outcomes in the context of physical education. These findings are consistent with various previous studies that show the ability to maintain concentration is closely related to children's academic and physical achievements. Barker, G. (2010) also indicated that concentration in motor activities is directly linked to improvements in cognitive and motor skills in children. This supports the argument that concentration in physical education not only affects motor learning outcomes but also cognitive development. No national or international journals were found that directly state that students' sports performance is unaffected by concentration.

On the contrary, most research indicates a positive relationship between concentration and sports achievement. A study published in the Jurnal Pendidikan Jasmani showed that concentration levels were significantly related to shooting accuracy in the sport of pétanque

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among participants in the Unesa Petanque Club. However, this study also noted that other factors, such as technique, arm muscle strength, and additional supporting factors, also influenced shooting accuracy outcomes (Agustina & Priambodo, 2017). Rathus (2011) stated that although concentration is important, in some cases, other factors such as motor skills or socio-economic background may have a greater impact on children's learning outcomes. The researcher also noted that factors such as age, experience, and background can affect the extent to which concentration is related to learning outcomes in young children. Miller & Ryan (2008) also found that while concentration influences academic achievement in some areas, in the context of physical education, physical engagement and intrinsic motivation in children also play a significant role that can be more dominant than concentration alone.

ANOVA Test

Table 6. ANOVA test

Model	Sum of Squares	Df	Mean Squa	F	Sig.	
1	Regression	333.756	1	333.756	10.062	.003b
	Residuals	995.119	30	33.171		
	Total	1328.875	31			
a. Dependent variable: Student preschool score (Y)						
b. Predictors: (Constant), Concentration (X)						

The ANOVA table explains whether there is a natural (significant) influence of the variable (X) on the variable (Y). From the output above, the f-count is 10,062 with a probability significance level of 0.000 <0.05, so as the basis for decision-making in the f-test, it indicated that concentration (X) has an effect on student preshool learning outcomes (Y) or means significant. Thus, the regression model can be used to predict the participation variable.

Significance Test

Table 7. ***Coefficients***

Model	Unstandardized Coefficients		Standardized coefficients	t		
	B	Std. Error	Beta	Sig.		
1	(Constant)	74.670	2.293		32.563	.000
	Concentration(X)	.606	.191	.501	3.172	.003
a. Dependent Variable: Student Score (Y)						

In Table 7 above, the t-value obtained is 3.172, with a significance value of 0.003. The t-table value of the research with samples or N = 32 can then be calculated df / dk = 32-2 = 30. With a level of 0.05, the table value with a significant level of 0.05 is 1.697. The calculation results that have been obtained show that t-count 3.172> t-table value of 1.697 and a significance value of 0.000 <0.05, which indicated a significant influence between learning concentration and student learning outcomes in sports subjects. These findings show that children with high concentration levels in physical activities tend to be more successful in achieving physical education learning goals. Gonzalez, A. A., & Veloz, C. (2013) discussed the influence of concentration on children's engagement in physical education. They found that interventions aimed at improving concentration in young children have a positive impact on their physical learning outcomes. This research supports findings that children with high

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concentration levels are more successful in achieving learning objectives in physical education. A study by Zentall (2005) showed that attention and concentration significantly influence children's cognitive and academic abilities. This can be compared to the findings of this study, which indicates that concentration is directly related to learning outcomes in early childhood physical education. However, some studies suggest that concentration is not the only factor influencing students' sports performance. For instance, research published in the Jurnal Ilmiah Kesehatan Masyarakat found that stretching exercises affect students' concentration, which in turn can influence their sports performance (Putri & Prajayanti, 2022).

Discussions

This research was conducted at TK Pertiwi II . The aim was to determine the effect of concentration on students' learning outcomes. The data obtained from the above research shows the concentration level of students' preschool learning outcomes in sports subjects. The results showed that students' learning outcomes in sports subjects in TK Pertiwi II were significantly affected by learning concentration. The results of data analysis using a simple linear regression equation show that the variable of learning concentration on sports learning outcomes has a positive and significant effect on sports learning outcomes, Sig value. 0.000 < 0.05 indicates that H0 is rejected and H1 is accepted. Students' sports scores are expected to improve along with their concentration on their studies.

In addition, the coefficient of determination of 25.1% shows that learning concentration contributes to the sports learning outcomes of students in preschool. Other variables not examined in this research also contributed 74.9%. This study shows that concentration only accounts for 25.1% of the impact on early childhood learning outcomes, indicating that there are many other variables that influence children's learning achievements. Early childhood learning outcomes, especially in physical education, can be affected by various interacting factors. One such factor is children's learning motivation, which plays a crucial role in the learning process. Intrinsic motivation, which is the internal drive to engage in an activity for enjoyment or interest, plays a significant role in children's involvement in learning. In physical education, this motivation can determine the extent of a child's participation in physical activities. Intrinsic motivation affects learning outcomes, particularly in physical activities. Children who are intrinsically motivated tend to have higher engagement and better outcomes (Ryan & Deci, 2000). Nurhayati & Wulandari (2021) also state that children who are motivated to participate in physical activities tend to achieve better learning outcomes in physical education.

Good physical condition also significantly affects children's ability to participate in learning activities. Children with good physical fitness are better able to engage in physical education activities, which ultimately enhances their learning outcomes. Children's physical fitness is directly related to their cognitive abilities and learning outcomes, including in physical education (Smith et al., 2019). There is a clear connection between a child's fitness and their performance in physical education. Children who are fitter are better able to participate in physical activities and tend to demonstrate better results (Fitria & Suryani, 2020).

The family environment plays a crucial role in early childhood development. Parents who provide support and opportunities for their children to engage in physical activities can enhance their involvement in physical education. Additionally, other social factors, such as peer relationships, are also important. Parental and family support can increase children's participation in physical activities, which in turn improves their learning outcomes (Barker, 2008). Social support, both from family and peers, plays a significant role in improving children's learning outcomes in physical education (Iskandar & Asnawi, 2022).

A child's personality, such as self-confidence, as well as emotional factors like anxiety or stress, significantly impacts their involvement in learning. Children who are more confident and have lower levels of anxiety tend to be more engaged in physical activities and achieve better learning outcomes. Children who are more self-assured and less anxious tend to be more

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active in learning, positively influencing their results (Miller & Ryan, 2008). Children with low anxiety levels and high self-confidence show better learning outcomes, particularly in physical education (Kurniawati & Rachmawati, 2021).

Children have different learning styles, which affect how they understand the material being taught. In physical education, kinesthetic learning styles (learning through movement) are particularly important, as young children are more likely to engage in physical activities that involve their bodies. According to Howard Gardner's theory of multiple intelligences, children with kinesthetic learning styles learn more quickly in physical education because they learn through experience and bodily movement (Gardner, 2006). Kinesthetic learning style is positively related to learning outcomes in physical education. Children with this style find it easier to understand motor skills through physical activities (Murtini & Wahyuni, 2021).

The quality of teaching provided by educators also plays a vital role in influencing children's learning outcomes. Teachers who can provide clear, engaging instructions that meet children's developmental needs will enhance their involvement in learning. Positive teacher-student interactions and high-quality teaching can improve children's learning outcomes, including in physical education (Pianta, 2001). A fun curriculum that is tailored to the child's age can motivate children to become more engaged in physical education, which improves their learning outcomes (Dewi & Fadila, 2022).

A conducive and enjoyable learning environment also influences children's learning outcomes. In physical education, adequate facilities such as large fields, sufficient sports equipment, and a supportive atmosphere significantly affect the success of learning. A well-structured environment can enhance children's concentration and engagement in learning, including in physical education (Zentall, 2005). The importance of supporting physical education facilities, such as sports equipment and safe, comfortable classrooms, in improving children's learning outcomes is emphasized (Aminah & Sari, 2022).

From the results of this assessment, the hypothesis is, that there is an effect of learning concentration on student preschool sports achievement in class is accepted. Around 26.52%, which is classified as quite strong. Navia and Yulia (2017) also found similar results in their research on how learning discipline and learning concentration affect student learning outcomes. In addition, learning concentration has a significant influence on learning outcomes. Maximum student preshool concentration helps students understand the topic. When students' concentration increases, their learning outcomes also increase. Intensive learning is essential so students preschool can concentrate on the subject matter given by the teacher. Albrecht (2009) suggested that concentration consists of thinking only about what is learned. Concentration means, at the same time, paying attention to other things that are not related to it (Cecep et al., 2022). Learning focus means putting aside everything irrelevant to the lesson and focusing on the topic, focusing on the content of the learning material and the process of obtaining it.

Results show that if students preschool have high learning concentration, they will try their best to follow the learning activities. This focus is significant for students preschool because it can help them overcome challenges positively, help them face and overcome challenges, and help them take risks. Additionally, Dimyati (2013) also stated the concentration of students in learning activities is critical so that students can complete all tasks and work given by the teacher. Students will actively and diligently pay attention to the material with learning concentration, which indirectly helps them achieve the best learning outcomes.

In addition, good concentration can also help preschool complete tasks faster and better, giving them more time to learn more information or prepare for tests. Kurniati (2009) stated that some types of student behavior can help teachers understand better their concentration level, for example, students' preschool desire to listen to the teacher's explanation, complete tasks given by the teacher, take notes on important material, look at

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pictures or media used, pay attention to friends' opinions, answer the teacher's questions, and be calm in class.

The research results also indicated that learning concentration is significant for achieving goals in the lesson. Concentration is necessary for students to learn subjects and listen in class (Pearl & Arunfred, 2019). It is because concentration is assessed by observing the material when learning takes place through concentration, such as reading, learning, and thinking, and occurs through prolonged concentration. Suardi (2018) also explains that learning concentration is an effort to avoid distractions and focus actions, thoughts, and attention on the subject matter. When someone can maintain good concentration during learning, they can focus more and follow the lesson better, which can improve understanding and the ability to remember information. Concentration is the primary driver of students' learning activities. It ensures that learning continues, provides direction for learning, enables the achievement of subject objectives, and allows students to achieve their school goals (Gujarati & Porter, 2009).

The likelihood of someone absorbing and understanding the right information increases with sharpened concentration. Students can understand lessons with complete focus. Prayitno (1997) stated that concentration allows a person to be the master of everything he learns. Attention is drawn to what is, of course, students' learning outcomes improve with their concentration. Learning concentration is essential to keep students focused on the lessons taught by their teachers. According to Kumar (2003), concentration is a mental state in which the entire human mind and senses are concentrated on one thing. If a person stays focused, the information and knowledge provided will be well received and can be used to deal with the current situation and then applied in the long term. These results are by learning concentration research conducted by Yarissumi (2017), where researchers emphasize the behavior change process. This change is shown in the form of ability, utilization, evaluation, or its relationship with behavior and values, knowledge, and basic skills that a person has.

The results also show how essential concentration is for students preshool who want to become athletes. Physical Education examines cognitive, affective, and psychomotor aspects of learning (Marheni et al., 2022). It is expected that children not only get a concept understanding but also be able to apply it in direct activities. It is in line with the concentration that shows how essential they are in the field.

Focus is essential for students to manage the expected competencies well during the learning process. Therefore, concentration is essential for students preschool in learning. Learning out of concentration is essential for students as it determines their concentration. It is shown by students' learning focus. Most students perform poorly due to a lack of concentration (Petersen, 2004). The ability to focus attention in class on the content of the material and the learning process of understanding it is known as learning focus (Dimyati, 2013). Students may only enjoy the lesson if they focus on learning.

Students preshool have tremendous learning success if they have a higher concentration. Conversely, students who do not concentrate, are busy, and do not focus on the lesson will have difficulty learning. This assumption is supported by educational experts who state that students' low learning achievement is mainly due to their weak concentration ability (Peterson, 2004). It is in line with the statement made by Setyani and Ismah (2018) that students preschool who do not concentrate during learning will have difficulty working on problems, which will affect their learning achievement.

Concentration can be a challenge for some children, especially students with a low attention span or those who are easily distracted. Learning concentration is one of the psychological aspects that is sometimes not easily understood by people other than the preschoolers themselves. Concentration significantly influences the success of the teaching and learning process; if someone struggles to concentrate, the teaching and learning process will not be optimal (Pashler et al., 2008). Students who can engage fully in the learning process are often the ones who can concentrate effectively. Meanwhile, preschoolers who cannot

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control their thoughts, focus, and the classroom atmosphere need to improve their ability to pay attention and absorb the subject matter that is appropriately taught by the teacher. This will ensure that preschoolers do not fail in learning activities. Those with good concentration levels tend to achieve better learning outcomes than those with poor concentration levels (Yusuf et al., 2017). This indicates that many preschoolers need support in concentrating while learning. The quality of learning activities and the optimal learning outcomes of individuals depend on the strength of their concentration.

The ability of preschooler's brains to focus on the subject matter is affected by their learning concentration. This concentration increases the likelihood of students picking up and understanding what is given. After 30 minutes, a person's learning ability decreases (Hamiyah & Jauhar, 2014). It is in line with Anugraheni (2017) that a person often has difficulty concentrating for various reasons, including lack of interest in the subject being studied, environmental disturbances such as noise and disorganized situations, disorganized thoughts, health problems, and fatigue. For this reason, good concentration requires the right learning environment. A person can more easily focus on the tasks to be completed if they are in a quiet and undisturbed environment. Regular and sufficient study time can also help students stay focused. It is proven by Mayasari (2017) that shows that increasing student learning concentration during the learning process through learning readiness fosters interest and motivation to learn, develops active learning patterns, and sometimes refreshes the mind.

Concentrate means to concentrate on something that attracts attention in the context of learning. Focus is a person's effort to concentrate on something of interest so that they can grasp and understand it. As a result of the learning process requiring concentration, it is expected that every child who starts learning at school has a good concentration level. A child's ability affects their concentration and the level of capture of the material the teacher provides during learning. Therefore, a fun method that makes children feel comfortable while learning profoundly and keeps them learning is needed.

Concentration is not an innate trait but rather the ability to focus and keep the mind focused. For an effective learning process, preschoolers need to focus on what they are learning. Many factors can cause preschoolers to lose concentration while learning. A person's concentration can be influenced by many things, one of which is the learning environment. It is in line with Surya (2009) that the learning environment is a component that affects learning concentration; the non-physical school environment and learning interests are one of them. A quiet environment will influence a person's concentration level to be good. Still, on the contrary, a quiet/noisy environment will worsen a person's concentration in the learning process. Berger & Kanetkar (1995) found that a person's environment dramatically affects their concentration level. In addition, external disturbances can affect a person's learning concentration (Ismah & Wibiastuti, 2015).

In addition, learning concentration can be influenced by the motivation obtained, desire or interest in something, pressure conditions that can threaten him, physical, psychological, emotional, and experiential conditions, the level of intelligence possessed, the surrounding environment, and lack of interest and motivation in the lesson. They can also experience feelings of anxiety, pressure, anger, worry, fear, hatred, and resentment, as well as noisy and unhealthy learning, passive learning, and ineffectiveness (Hasminidiarty, 2017). Lipdyaningsih et al. (2017) added that two things that might cause students' learning concentration to decline are (1) lack of breakfast, which can help students learn better, and (2) frequent use of mobile phones, not only for studying but also for playing games and social media. It can interfere with learning if done for a short time.

Given that preschooler's poor learning outcomes are affected by their ability to concentrate on learning. During the learning process, student focus is significant. The high concentration of students significantly affects their learning outcomes. In addition, due to the relationship between concentration and a positive attitude, high concentration can also influence a person's attitude so they can achieve optimal results. Thus, teachers must improve

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students' concentration in learning. Furthermore, students need to maintain a good concentration level during learning and try to improve their concentration if necessary (Yusuf et al., 2017).

Improving preschooler's concentration is a big challenge in implementing learning. It is essential to remember that each preschooler's has different needs and learning styles. Teachers can create a calm, organized, and undisturbed learning environment to improve student concentration, such as sufficient lighting, a comfortable temperature, and ergonomic tables and chairs for students to feel comfortable and focus on what they are learning. In addition, good timing helps students prepare themselves to study. Teachers are expected to teach based on a model that matches the characteristics of students (Marheni et al., 2022) as one of the ways to make students concentrate. Furthermore, calling on students to answer questions can help them stay concentrated in English class. According to Cicekci and Sadik (2019), asking questions about the subject is a good way for teachers to overcome the problem of students' loss of concentration. When students know they may be asked to answer questions in class, they will be more alert to what their teachers say. It is because concentration is an essential component of learning that helps students. If students cannot concentrate on the subject matter, they will lose the benefit of not getting anything out of the material. Thus, concentration is a condition for students' success in achieving their learning goals.

Conclusion

Based on a discussion conducted by the researcher, the results indicate that concentration has a vital role in one's learning outcomes. One of the factors that can affect preschooler's learning outcomes is concentration, which is defined as the ability to focus attention on something for a long time and is influenced by internal and external factors. Concentration is a very important factor in the learning outcomes of young children, and improving concentration can have a direct impact on their academic achievements. Preschooler's with a low concentration level will have a lower quality of activity, which in turn can lead to a lack of seriousness in learning and a decrease in their understanding of the material. Therefore, teachers need to understand various strategies to enhance children's concentration in the learning context, such as creating a structured learning environment, using engaging teaching methods, teaching relaxation techniques, providing positive feedback, and minimizing external distractions. With the right approach, children's concentration can be improved, which in turn will enhance their learning outcomes.

This study used a sample limited to preschool children from specific schools, which may not represent the entire population of early childhood children across different regions. This could limit the generalizability of the research findings to broader contexts. This research focused only on concentration as a variable influencing early childhood learning outcomes. However, there are many other factors, such as motivation, teaching style, or socio-economic conditions, that may also affect children's learning outcomes, which were not controlled for in this study. The limited time for conducting this research resulted in data that only reflects the conditions at a specific period, limiting the ability to observe changes in concentration and learning outcomes over the long term.

Future research is recommended to use a larger and more diverse sample, including preschool children from various regions and socio-economic backgrounds. This would broaden the representation of the research findings and increase external validity. For future studies, it is suggested to use measurement instruments for concentration that are more appropriate for the characteristics of young children, such as games or simpler and more enjoyable activities, so that the measurement results are more accurate and relevant to their age. Future research should also consider other variables that could influence early childhood learning outcomes, such as learning motivation, social skills, or teaching quality. By controlling for more variables, research results could better reflect the factors contributing to learning outcomes comprehensively. Given that the focus of this research is physical

education, future studies should delve deeper into how physical activities, such as sports or motor skills games, can specifically influence concentration and learning outcomes in early childhood education. By addressing these limitations and implementing the suggestions above, future research can provide a more profound and comprehensive understanding of the relationship between learning concentration and learning outcomes in young children.

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